

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>B-14519 PCT</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/IB2004/002016</b>	International filing date (day/month/year) <b>10.06.2004</b>	Priority date (day/month/year) <b>23.07.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>A47J31/40</b>		
Applicant <b>MONODOR S.A.</b>		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <u>8</u> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>4</u> sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4.	This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input checked="" type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-10 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* 1-15 \_\_\_\_\_ received by this Authority on 14.02.2005 with letter
- nos.\* \_\_\_\_\_ received by this Authority on of 11.02.2005
- ☒ the drawings:
- sheets 1/6-6/6 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. IV Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
  - ☐ restricted the claims.
  - ☐ paid additional fees.
  - ☐ paid additional fees under protest.
  - ☐ neither restricted the claims nor paid additional fees.
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
  - ☐ complied with.
  - ☒ not complied with for the following reasons:

See separate sheet.

4. Consequently, this report has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos. \_\_\_\_\_

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	4, 5, 8-10, 13	YES
	Claims	1-3, 6, 7, 11, 12, 14, 15	NO
Inventive step (IS)	Claims	4, 5, 8-10	YES
	Claims	1-3, 6-7, 11-15	NO
Industrial applicability (IA)	Claims	1-15	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
Reference is made to the following documents:			
D1: EP-A-0 521 187 (NESTLE SA) 7 January 1993 (1993-01-07)			
D2: WO 00/56629 A (NESTLE SA; YOAKIM ALFRED (CH); MASEK PETR (CH)) 28 September 2000 (2000-09-28)			
D3: EP-A-0 870457 (NESTLE SA) 14 October 1998 (1998-10-14)			
The present application fails to meet the requirements of PCT Article 33(1), since the subject matter of claim 1 does not comply with the criterion of novelty as defined by PCT Article 33(2).			
1. D1 describes:			
a method for preparing a beverage or a liquid foodstuff from a capsule (18) containing a product with a substance to be extracted; said capsule (18) has a flexible membrane (upper surface 25, see column 3, lines 30 to 34) having a high elastic or permanent deformation capability; said method includes the steps of perforating a plurality of holes (figures 7 and 8) distributed over the flexible membrane (25) and injecting water onto the flexible membrane so that the membrane deforms towards the product inside the capsule and the water enters the capsule via said holes (see column 5, line 39 to column 6, line 4); the size of the holes perforated by the perforating spikes is <u>dependent on</u> , and therefore controlled by, the fill level or the compactness of the product inside			

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
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the capsule, which in turn influences the hydraulic pressure differential  $\Delta P$  (there is an increase in pressure inside the cartridge, see column 5 lines 52 to 53) between the two sides of the flexible membrane (25), thereby achieving self-regulation of the compression of the product contained in the capsule.

The subject matter of claims 1 and 2 is therefore not novel (PCT Article 33(2)).

2. The present application fails to meet the requirements of PCT Article 33(1), since the subject matter of claim 6 does not involve an inventive step as defined by PCT Article 33(3).

D1, which is considered to be the prior art closest to the subject matter of claim 6, describes (the references between parentheses apply to said document):

a device (see figures 7 and 8) for preparing a beverage of a liquid foodstuff from a capsule (18) containing a product with a substance to be extracted; which device includes an injection head (figure 5) including a perforating surface provided with a plurality of perforating spikes (41) distributed over the perforating surface and at least one water supply channel (4) opening onto the perforating surface; said perforating spikes have a smooth flared shape, without cutting edges, and an average cone angle of less than 60°.

Consequently, the subject matter of claim 6 differs from this known device in that the perforating surface has an essentially curved and convex shape.

The problem that the present invention is intended to solve can be considered to be that of optimising extraction of the substance.

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>The solution proposed in claim 6 of the present application is considered not to involve an inventive step (PCT Article 33(3)) for the following reasons:</p> <p>- according to the description provided in D3, column 14, lines 47 to 57, a perforating surface having an essentially curved and convex shape has the same advantages as those mentioned in the present application (an improved distribution of the extraction water, so that the upper surface of the sachet is urged against said concave area). Consequently, the inclusion of this feature in the device described in D1 is a routine design measure for a person skilled in the art seeking to solve the stated problem.</p> <p>3. D2 describes:</p> <p>a capsule (see abstract) for preparing a beverage or a liquid foodstuff containing a product with a substance to be extracted (3); which capsule (1) includes an essentially rigid shell (see page 3, lines 17 to 22 and figure 1) consisting of a sidewall and a base wall constituting a container wherein the product is stored; said shell further includes a ring-shaped rim (7) extending essentially in a radial plane R; said capsule further includes a flexible membrane (4) bonded or welded (page 4, line 18) to the ring-shaped rim; said membrane and said shell are made from one or more polymers (see page 1, lines 14 to 18); said flexible membrane is made from a multi-layer film (see page 1, lines 17 to 18).</p> <p>The subject matter of claim 11 is therefore not novel (PCT Article 33(2)).</p> <p>4. In the light of D1, D2, D3 and the corresponding passages cited in the international search report, dependent claims 2, 3, 7 and 12 to 15 contain no feature which, when combined with the features of any one of the claims to</p>

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
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which they refer, defines subject matter that complies with the PCT requirements of novelty and/or inventive step.

5. The combination of features of claim 8 is not found in the prior art and cannot be derived in an obvious manner therefrom.

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box IV

This International Preliminary Examining Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims 1 to 8 and 11 to 15

A device for preparing a beverage from a capsule containing a product with a substance to be extracted; said device includes a perforating surface provided with a plurality of perforating spikes and at least one water supply channel opening onto the perforating surface; said spikes have a smooth flared shape, without cutting edges, and an average cone angle of less than 60°; a method for preparing a beverage from a capsule and a capsule for preparing a beverage.

2. Claims 8 to 10

A beverage preparation device that includes a body or a capsule holder including a base wall and an intermediate base wall consisting of a filter wall provided with a plurality of perforating spikes and flow holes; which base wall includes a flow channel surrounded by lips raised above the lowest point of the base.

The common concept linking independent claims 6 and 8 is as follows:

- a device for preparing a beverage from a capsule.

This common concept is not novel (cf. D1, abstract).

Thus no technical relationship involving one or more of the same or corresponding special technical features, within the meaning of PCT Rule 13.2, exists between these inventions. The requirement of unity of invention, within the meaning of PCT Rule 13.1, is therefore not fulfilled.